



FILED

**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA
AND THE CALIFORNIA ENERGY COMMISSION**

03:18 PM

Order Instituting Rulemaking to Implement
the Commission's Procurement Incentive
Framework and to Examine the Integration of
Greenhouse Gas Emissions Standards into
Procurement Policies.

Rulemaking 06-04-009
(Filed April 13, 2006)

Energy Commission Docket 07-OIIP-01

**REPLY COMMENTS OF PACIFICORP (U 901 E) ON ISSUES RELATED TO THE
DISTRIBUTION OF GREENHOUSE GAS (GHG) EMISSIONS ALLOWANCES**

Kyle L. Davis
PacifiCorp
825 NE Multnomah, 20th Floor
Portland, OR 97232
Telephone: 503-813-6601
Facsimile: 503-813-6060
Email: Kyle.L.Davis@pacificorp.com

Date: November 14, 2007

**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA
AND THE CALIFORNIA ENERGY COMMISSION**

Order Instituting Rulemaking to Implement
the Commission's Procurement Incentive
Framework and to Examine the Integration of
Greenhouse Gas Emissions Standards into
Procurement Policies.

Rulemaking 06-04-009
(Filed April 13, 2006)

Energy Commission Docket 07-OIIP-01

**REPLY COMMENTS OF PACIFICORP (U 901 E) ON ISSUES RELATED TO THE
DISTRIBUTION OF GREENHOUSE GAS (GHG) EMISSIONS ALLOWANCES**

Pursuant to the *Administrative Law Judge's Ruling Requesting Comments and Noticing Workshop on Allowance Allocation Issues* dated October 15, 2007, PacifiCorp respectfully submits these reply comments addressing comments submitted by the parties on October 31, 2007, and raised during the subsequent joint workshop held November 5, 2007, on issues related to the distribution of greenhouse gas ("GHG") emission allowances. PacifiCorp appreciates the opportunity to provide further comments in this proceeding on these important issues.

I. DISCUSSION

PacifiCorp has reviewed parties' October 31, 2007 comments, as well as the comments made during the November 5, 2007 workshop. Given the volume of information and the challenges with responding to individual comments, PacifiCorp will follow the lead of various other parties during the joint workshop and articulate a more precise position on allowance allocation issues. PacifiCorp's position was highly fragmented in the initial set of comments because parties were asked to respond to specific questions.

A. Should Emissions Allowances Be Auctioned or Allocated?

Unlike most other California investor-owned utilities, PacifiCorp is a vertically-integrated utility owning approximately 80 percent of its generation portfolio, most of which is located outside the state. The rate impact risks to PacifiCorp's customers are disproportionately higher compared to the customers of other California utilities who have already divested themselves of fossil generation. Those deregulated utilities have had, for several years, the ability to contract away any potential stranded cost risk, while also placing new construction risk squarely on independent generators competing for their business.

PacifiCorp supports a free allocation of GHG emission allowances based upon the "grandfathering" or historical emissions method, which would place PacifiCorp in a better position to manage any adverse rate impacts on PacifiCorp's California customers. To the extent California decides to opt for the auction method, PacifiCorp encourages the state to adopt an approach that transitions from a free allocation of allowances, based upon historic emissions, to an auction in a manner that avoids rate shock.

PacifiCorp reiterates that the decisions to build fossil fuel power plants, which were made over many decades and were intended to achieve a fuel mix, were economically rational and in virtually all cases approved as prudent by regulatory authorities. Load serving entities and their customers should not be punished for past prudent decisions. PacifiCorp also vigorously opposes providing GHG emission allowances to non-emitters based on a "benchmarking" or megawatt-hour "output-based" methodologies. It will simply create large wealth transfers among utilities unrelated to the overall goal of emissions reduction. It is unclear what public purpose would be served by distributing allowances to non-emitters. Utilities that built hydroelectric dams many decades ago or nuclear plants in the sixties and seventies did not do so to avoid carbon dioxide emissions and there is no reason to provide them with a financial windfall. These zero-emitting resources do not bear the burden or the direct costs of effectuating greenhouse gas emissions reductions.

B. How Should Allowances Be Distributed?

PacifiCorp's opening remarks posited dividing the annual GHG emission allowance budget into three separate distributions: 1) a new entrant set-aside; 2) free allocations to emitters; and 3) an auction. As PacifiCorp urged within its earlier remarks, the amount budgeted for each should be the subject of further modeling with a goal of achieving the best combination of cost, fairness, and enforceability.

1. Free Allocation for New Entrant Set-Aside

PacifiCorp supports some nominal amount (< 3 percent) of the overall GHG emission allowance cap being set aside each year for new market entrants (with projects that will produce GHG emissions) prior to the distribution of the GHG emission allowances. PacifiCorp recommends that a load-based CO₂ cap-and-trade rule include a specific provision for new entrants, such as new self-generators who had not been previously served by a load serving entity, where the state would hold a "new entrant" GHG emission allowance set-aside each year. At the end of each year, the state would pro-rate any unused "new entrant" allowances to the various regulated entities. The California Air Resources Board would set the size of the allowance pool in rule.

2. Free Allocation to Existing Emitters

PacifiCorp proposed using 95 percent of the now adjusted annual GHG emission allowance budget for free GHG emission allowance allocations to existing emitters (i.e., which would either be the load serving entity under a load-based cap-and-trade approach or the load serving entity, an-state generator, or some combination of the two to accommodate the first seller/deliverer approach). To establish each existing emitter's share of the allocation, a statewide GHG baseline would need to be calculated using the most recent emissions data.

PacifiCorp supports calculating a statewide GHG baseline using multiple

historical years.¹ A baseline should rely on historical CO₂ emissions data from all existing emitters, using data from a five year period prior to the rule's effective start date. California would drop data from the years with the highest and lowest emissions for each existing emitter. Average emissions for the three remaining years would form the basis for distributing GHG emission allowances to each existing emitter. The sum of all existing emitters' GHG baseline emissions would establish the GHG baseline, with each existing emitters' three-year average emissions used to calculate its share (or ratio) of the initial GHG baseline and each subsequent year's GHG emission allowance budget (i.e., the declining emissions cap). Note, the ratio would not change, regardless of the decline in the overall cap or in the case of a gradual transition to an auction method for distributing allowances. This predictability is extremely valuable for new fossil-fueled resource development.

3. **Auction Allocation**

PacifiCorp has expressed support for some nominal level of auction (≤ 5 percent) regardless of the regulatory approach to ensure GHG emission allowance market liquidity and an opportunity for trading. PacifiCorp also supports the state conducting at least two auctions a year. To the extent auction proceeds are returned to the load serving entities to manage the rate impacts, as has been suggested by some participants, PacifiCorp concurs that the increased cost of the auction method on customer rates could be partially mitigated. PacifiCorp supports auction proceeds returning to the electricity sector and their use toward achieving the overall goal of GHG emissions reductions.

However, under any auction method, PacifiCorp continues to be concerned about the creation of artificial scarcity. Where GHG emission allowances are auctioned, there is a risk of, and, indeed, an incentive for, non-generators bidding to acquire allowances. Financial

¹ When establishing a GHG baseline, evaluating a larger number of years allows the state to more equitably address year-over-year hydro production variability and accommodate unit-specific concerns, such as reduced emissions as a result of scheduled maintenance or unscheduled outages.

speculators could participate, hoping to acquire allowances cheaply and sell them to companies that need them to operate at a higher price. The risk alone could drive up the bid price in these auctions. As the cost of acquiring allowances eventually will be passed on the California electricity consumers, market manipulation that drives up the cost of allowances, the supply of which will be limited, should be prevented.

Restricting auction participation is the most direct way to address this risk. Rules for bidders could include either currently being a first-seller of electricity in California, having a pending application for a California-based generation unit, or being able to show to the satisfaction of regulatory staff that they have a good faith and reasonable expectation that they will be a first seller in California during the compliance period for which the allowances apply—coupled with administrative/criminal penalties if they are shown not to have pursued such plans in good faith during the compliance period.

C. Other “GHG Emission Allowance” Design Considerations

PacifiCorp supports California adopting a GHG emission allowance banking provision, whereby an owner could “bank” any surplus allowance for use within a future compliance period. However, to address artificial scarcity, auctioned allowances should have an identified expiration date, such as two years from the date of auction. Such a rule would ensure market liquidity.

PacifiCorp respectfully requests that the Commission carefully consider the impact of its GHG rules on PacifiCorp and other small multi-jurisdictional utilities (collectively, “SMJUs”). The combination of utility-owned generating resources and resources providing contracted for power located throughout the western United States, coupled with load-serving responsibilities and multi-state cost structures, places SMJUs in the complicated position of having to equitably assign the costs of system energy, including emissions/allowances, to each state’s retail load. The Commission has recognized the unique implementation issues facing SMJUs, most notably within the Renewable Portfolio Standard Program, R.06-02-012. Unlike

large California investor-owned utilities, PacifiCorp's generating assets and power purchases are not used exclusively to serve California retail load and PacifiCorp does not rely significantly on unspecified power purchases.

II. CONCLUSION

The distribution method proposed by PacifiCorp will inherently minimize the rate impacts for its customers as well as those of other existing emitters. These customers bear the greatest direct cost of complying with the new rule. PacifiCorp's preferred method preserves the integrity of the emissions cap and allows the regulated entity to more easily manage and plan for an ever-declining allowance allocation.

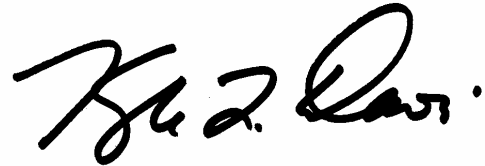
The proponents of alternative GHG emission allowance distribution methods bear the burden of demonstrating to the Commission that their preferred approach will avoid rate shocks not only to PacifiCorp's customers, but to the customers of other similarly situated existing emitters. As stated before, PacifiCorp believes its preferred distribution method should be the subject of further modeling and optimized to achieve the best combination of cost, fairness, and enforceability.

PacifiCorp appreciates the opportunity to submit reply comments on issues raised by the parties related to the distribution of GHG emission allowances. For all the foregoing reasons, PacifiCorp recommends that the Joint Staff adopt PacifiCorp's preferred GHG emission allowance distribution method and, in the alternative, consider developing an allowance distribution method for SMJUs and their unique circumstances.

Dated: November 14, 2007

Respectfully submitted,

By

A handwritten signature in black ink, appearing to read "Kyle L. Davis". The signature is fluid and cursive, with a period at the end.

Kyle L. Davis
Manager of Environmental Policy &
Strategy PacifiCorp
825 NE Multnomah
Portland, OR 97232
(503) 813-6601 Phone
(503) 813-7247 Fax
E-Mail: Kyle.L.Davis@PacifiCorp.com

CERTIFICATE OF SERVICE

I, Lisa Vieland, certify that I have on this 14th day of November 2007 caused a copy of the foregoing

**REPLY COMMENTS OF PACIFICORP (U 901 E) ON ISSUES RELATED
TO THE DISTRIBUTION OF GREENHOUSE GAS (GHG) EMISSIONS
ALLOWANCES**

to be served on all known parties to R.06-04-009 listed on the most recently updated service list available on the California Public Utilities Commission website, via email to those listed with email and via U.S. mail to those without email service. I also caused courtesy copies to be hand-delivered as follows:

Commissioner President Michael R. Peevey
California Public Utilities Commission
State Building, Room 5218
505 Van Ness Avenue
San Francisco, CA 94102

ALJ Charlotte TerKeurst
California Public Utilities Commission
State Building, Room 5117
505 Van Ness Avenue
San Francisco, CA 94102

ALJ Jonathan Lakritz
California Public Utilities Commission
State Building, Room 5020
505 Van Ness Avenue
San Francisco, CA 94102

I declare under penalty of perjury that the foregoing is true and correct. Executed this 14th day of November 2007 at San Francisco, California.

/s/ Lisa Vieland
Lisa Vieland

Service List R.06-04-009
Last Updated 11/13/07

CINDY ADAMS
cadams@covantaenergy.com

STEVEN S. SCHLEIMER
steven.schleimer@barclayscapital.com

STEVEN HUHMAN
steven.huhman@morganstanley.com

RICK C. NOGER
rick_noger@praxair.com

KEITH R. MCCREA
keith.mccrea@sablaw.com

ADAM J. KATZ
ajkatz@mwe.com

CATHERINE M. KRUPKA
ckrupka@mwe.com

LISA M. DECKER
lisa.decker@constellation.com

CATHY S. WOOLLUMS
cswoollums@midamerican.com

KEVIN BOUDREAUX
kevin.boudreaux@calpine.com

THOMAS DILL
trdill@westernhubs.com

E.J. WRIGHT
ej_wright@oxy.com

PAUL M. SEBY
pseby@mckennalong.com

TIMOTHY R. ODIL
todil@mckennalong.com

STEPHEN G. KOERNER, ESQ.
steve.koerner@elpaso.com

JENINE SCHENK
jenine.schenk@apses.com

JOHN B. WELDON, JR.
jbw@slwplc.com

KELLY BARR
kelly.barr@srpnet.com

ROBERT R. TAYLOR
rrtaylor@srpnet.com

STEVEN S. MICHEL
smichel@westernresources.org

ROGER C. MONTGOMERY
roger.montgomery@swgas.com

LORRAINE PASKETT
Lorraine.Paskett@ladwp.com

RONALD F. DEATON
ron.deaton@ladwp.com

SID NEWSOM
snewsom@semprautilities.com

DAVID L. HUARD
dhuard@manatt.com

CURTIS L. KEBLER
curtis.kebler@gs.com

DENNIS M.P. EHLING
dehling@kling.com

GREGORY KOISER
gregory.koiser@constellation.com

NORMAN A. PEDERSEN
npedersen@hanmor.com

MICHAEL MAZUR
mmazur@3phasesRenewables.com

VITALY LEE
vitaly.lee@aes.com

TIFFANY RAU
tiffany.rau@bp.com

GREGORY KLATT
klatt@energyattorney.com

RICHARD HELGESON
rhelgeson@sccpa.org

DANIEL W. DOUGLASS
douglass@energyattorney.com

PAUL DELANEY
pssed@adelphia.net

AKBAR JAZAYEIRI
akbar.jazayeri@sce.com

ANNETTE GILLIAM
annette.gilliam@sce.com

CATHY A. KARLSTAD
cathy.karlstad@sce.com

LAURA I. GENAO
Laura.Genao@sce.com

RONALD MOORE
rkmoore@gswater.com

DON WOOD
dwood8@cox.net

AIMEE M. SMITH
amsmith@sempra.com

ALLEN K. TRIAL
atrial@sempra.com

ALVIN PAK
apak@sempraglobal.com

DAN HECHT
dhecht@sempratrading.com

DANIEL A. KING
daking@sempra.com

SYMONE VONGDEUANE
svongdeuane@semprasolutions.com

THEODORE ROBERTS
troberts@sempra.com

DONALD C. LIDDELL, P.C.
liddell@energyattorney.com

MARCIE MILNER
marcie.milner@shell.com

REID A. WINTHROP
rwinthrop@pilotpowergroup.com

THOMAS DARTON
tdarton@pilotpowergroup.com

STEVE RAHON
lschavrien@semprautilities.com

GLORIA BRITTON
GloriaB@anzaelectric.org

LYNELLE LUND
llund@commerceenergy.com

TAMLYN M. HUNT
thunt@cecmail.org

DIANE I. FELLMAN
diane_fellman@fpl.com

JEANNE M. SOLE
jeanne.sole@sfgov.org

JOHN P. HUGHES
john.hughes@sce.com

LAD LORENZ
llorenz@semprautilities.com

MARCEL HAWIGER
marcel@turn.org

NINA SUETAKE
nsuetake@turn.org

Diana L. Lee
dil@cpuc.ca.gov

F. Jackson Stoddard
fjs@cpuc.ca.gov

AUDREY CHANG
achang@nrdc.org

DONALD BROOKHYSER
rsa@a-klaw.com

EVELYN KAHL
ek@a-klaw.com

KRISTIN GRENFELL
kgrenfell@nrdc.org

MICHAEL P. ALCANTAR
mpa@a-klaw.com

SEEMA SRINIVASAN
sls@a-klaw.com

WILLIAM H. CHEN
bill.chen@constellation.com

BRIAN K. CHERRY
bkc7@pge.com

EDWARD G POOLE
epoole@adplaw.com

ANN G. GRIMALDI
agrimaldi@mckennalong.com

BRIAN T. CRAGG
bcragg@goodinmacbride.com

JAMES D. SQUERI
jsqueri@gmssr.com

JEANNE B. ARMSTRONG
jarmstrong@goodinmacbride.com

KAREN BOWEN
kbowen@winston.com

LISA A. COTTLE
lcottle@winston.com

SEAN P. BEATTY
sbeatty@cwclaw.com

VIDHYA PRABHAKARAN
vprabhakaran@goodinmacbride.com

JOSEPH M. KARP
jkarp@winston.com

JEFFREY P. GRAY
jeffgray@dwt.com

CHRISTOPHER J. WARNER
cjw5@pge.com

SARA STECK MYERS
ssmyers@att.net

LARS KVALE
lars@resource-solutions.org

ANDREW L. HARRIS
alho@pge.com

ANDREA WELLER
aweller@sel.com

JENNIFER CHAMBERLIN
jchamberlin@strategicenergy.com

BETH VAUGHAN
beth@beth411.com

KERRY HATTEVIK
kerry.hattevik@mirant.com

AVIS KOWALEWSKI
kowalewskia@calpine.com

WILLIAM H. BOOTH
wbooth@booth-law.com

J. ANDREW HOERNER
hoerner@redefiningprogress.org

JANILL RICHARDS
janill.richards@doj.ca.gov

CLIFF CHEN
cchen@ucsusa.org

GREGG MORRIS
gmorris@emf.net

R. THOMAS BEACH
tomb@crossborderenergy.com

KENNETH C. JOHNSON
kjinnovation@earthlink.net

BARRY F. MCCARTHY
bmcc@mccarthyllaw.com

C. SUSIE BERLIN
sberlin@mccarthyllaw.com

MIKE LAMOND
Mike@alpinenaturalgas.com

JOY A. WARREN
joyw@mid.org

UDI HELMAN
UHelman@caiso.com

JOHN JENSEN
jjensen@kirkwood.com

MARY LYNCH
mary.lynych@constellation.com

LEONARD DEVANNA
lrdevanna-rf@cleanenergysystems.com

ANDREW BROWN
abb@eslawfirm.com

BRUCE MCLAUGHLIN
mclaughlin@braunlegal.com

GREGGORY L. WHEATLAND
glw@eslawfirm.com

JANE E. LUCKHARDT
jluckhardt@downeybrand.com

JEFFERY D. HARRIS
jdh@eslawfirm.com

VIRGIL WELCH
vwelch@environmentaldefense.org

WILLIAM W. WESTERFIELD, 111
www@eslawfirm.com

DOWNEY BRAND
DOWNEY BRAND
Sacramento Municipal
555 CAPITOL MALL, 10TH FLOOR
SACRAMENTO, CA 95814-4686

RAYMOND J. CZAHAH, C.P.A.
westgas@aol.com

STEVEN M. COHN
scohn@smud.org

ANN L. TROWBRIDGE
atrowbridge@daycartermurphy.com

DAN SILVERIA
dansvec@hdo.net

JESSICA NELSON
notice@psrec.coop

DONALD BROOKHYSER
deb@a-klaw.com

CYNTHIA SCHULTZ
cynthia.schultz@pacificcorp.com

KYLE L. DAVIS
kyle.l.davis@pacificcorp.com

RYAN FLYNN
ryan.flynn@pacificcorp.com

IAN CARTER
carter@ieta.org

JASON DUBCHAK
jason.dubchak@niskags.com

BRIAN M. JONES
bjones@mjbardley.com

MATTHEW MOST
EDISON MISSION MARKETING &
TRADING, INC.
160 FEDERAL STREET
BOSTON, MA 02110-1776

KENNETH A. COLBURN
kcolburn@symbioticstrategies.com

RICHARD COWART
rapcowart@aol.com

KATHRYN WIG
Kathryn.Wig@nrgenergy.com

SAKIS ASTERIADIS
sasteriadis@apx.com

GEORGE HOPLEY
george.hopley@barcap.com

ELIZABETH ZELLJADT
ez@pointcarbon.com

DALLAS BURTRAW
burtraw@rff.org

VERONIQUE BUGNION
vb@pointcarbon.com

KYLE D. BOUDREAUX
kyle_boudreaux@fpl.com

ANDREW BRADFORD
andrew.bradford@constellation.com

GARY BARCH
gbarch@knowledgeinenergy.com

RALPH E. DENNIS
ralph.dennis@constellation.com

SAMARA MINDEL
smindel@knowledgeinenergy.com

BARRY RABE
brabe@umich.edu

BRIAN POTTS
bpotts@foley.com

JAMES W. KEATING
james.keating@bp.com

CYNTHIA A. FONNER
Cynthia.A.Fonner@constellation.com

JAMES ROSS
jimross@r-c-s-inc.com

TRENT A. CARLSON
tcarlson@reliant.com

GARY HINNERS
ghinners@reliant.com

JEANNE ZAIONTZ
zaiontj@bp.com

JULIE L. MARTIN
julie.martin@bp.com

FIJI GEORGE
fiji.george@elpaso.com

ED CHIANG
echiang@elementmarkets.com

FRANK STERN
fstern@summitblue.com

NADAV ENBAR
nenbar@energy-insights.com

NICHOLAS LENSSEN
nlenssen@energy-insights.com

ELIZABETH BAKER
bbaker@summitblue.com

WAYNE TOMLINSON
william.tomlinson@elpaso.com

KEVIN J. SIMONSEN
kjsimonsen@ems-ca.com

SANDRA ELY
Sandra.ely@state.nm.us

BRIAN MCQUOWN
bmcquown@reliant.com

DOUGLAS BROOKS
dbrooks@nevdp.com

ANITA HART
anita.hart@swgas.com

RANDY SABLE
randy.sable@swgas.com

BILL SCHRAND
bill.schrand@swgas.com

JJ PRUCNAL
jj.prucnal@swgas.com

SANDRA CAROLINA
sandra.carolina@swgas.com

CYNTHIA MITCHELL
ckmitchell1@sbcglobal.net

CHRISTOPHER A. HILEN
chilen@sppc.com

ELENA MELLO
emello@sppc.com

TREVOR DILLARD
tdillard@sierrapacific.com

DARRELL SOYARS
dsoyars@sppc.com

JOSEPH GRECO
jgreco@caithnessenergy.com

FRANK LUCHETTI
fluchetti@ndep.nv.gov

LEILANI JOHNSON KOWAL
leilani.johnson@ladwp.com

RANDY S. HOWARD
randy.howard@ladwp.com

ROBERT K. ROZANSKI
Robert.Rozanski@ladwp.com

ROBERT L. PETTINATO
robert.pettinato@ladwp.com

HUGH YAO
HYao@SempraUtilities.com

RASHA PRINCE
rprince@semprautilities.com

RANDALL W. KEEN
rkeen@manatt.com

S. NANCY WHANG
nwhang@manatt.com

PETER JAZAYERI
pjazayeri@stroock.com

DEREK MARKOLF
derek@climaterestry.org

DAVID NEMTZOW
david@nemtzw.com

HARVEY EDER
harveyederpspc.org@hotmail.com

STEVE ENDO
sendo@ci.pasadena.ca.us

STEVEN G. LINS
slins@ci.glendale.ca.us

TOM HAMILTON
THAMILTON5@CHARTER.NET

BRUNO JEIDER
bjeider@ci.burbank.ca.us

RICHARD J. MORILLO
rmorillo@ci.burbank.ca.us

ROGER PELOTE
roger.pelote@williams.com

AIMEE BARNES
aimee.barnes@ecosecurities.com

CASE ADMINISTRATION
case.admin@sce.com

TIM HEMIG
tim.hemig@nrgenergy.com

BARRY LOVELL
bjl@bry.com

ALDYN HOEKSTRA
aldyn.hoekstra@paceglobal.com

YVONNE GROSS
ygross@sempraglobal.com

JOHN LAUN
jlaun@apogee.net

KIM KIENER
kмкиener@fox.net

SCOTT J. ANDERS
scottanders@sandiego.edu

JOSEPH R. KLOBERDANZ
jkloberdanz@semprautilities.com

ANDREW MCALLISTER
andrew.mcallister@energycenter.org

JACK BURKE
jack.burke@energycenter.org

JENNIFER PORTER
jennifer.porter@energycenter.org

SEPHRA A. NINOW
sephra.ninow@energycenter.org

DESPINA NIEHAUS
dniehaus@semprautilities.com

JOHN W. LESLIE
jleslie@luce.com

ORLANDO B. FOOTE, III
ofoote@hkcf-law.com

ELSTON K. GRUBAUGH
ekgrubaugh@iid.com

THOMAS MCCABE
EDISON MISSION ENERGY
18101 VON KARMAN AVE., SUITE
1700
IRVINE, CA 92612

JAN PEPPER
pepper@cleanpowermarkets.com

GLORIA D. SMITH
gsmith@adamsbroadwell.com

MARC D. JOSEPH
mdjoseph@adamsbroadwell.com

HAYLEY GOODSON
hayley@turn.org

MICHEL FLORIO
mflorio@turn.org

DAN ADLER
Dan.adler@calsef.org

MICHAEL A. HYAMS
mhyams@sflower.org

THERESA BURKE
tburke@sflower.org

NORMAN J. FURUTA
norman.furuta@navy.mil

AMBER MAHONE
amber@ethree.com

ANNABELLE MALINS
annabelle.malins@fco.gov.uk

DEVRA WANG
dwang@nrdc.org

KAREN TERRANOVA
filings@a-klaw.com

NORA SHERIFF
nes@a-klaw.com

OLOF BYSTROM
obystrom@cera.com

SETH HILTON
sdhilton@stoel.com

SHERYL CARTER
scarter@nrdc.org

ASHLEE M. BONDS
abonds@thelen.com

CARMEN E. BASKETTE
cbaskette@enernoc.com

COLIN PETHERAM
colin.petheram@att.com

JAMES W. TARNAGHAN
jwmctarnaghan@duanemorris.com

KEVIN FOX
kfox@wsgr.com

KHURSHID KHOJA
kkhoja@thelenreid.com

PETER V. ALLEN
pvallen@thelen.com

SHERIDAN J. PAUKER
spauker@wsgr.com

ROBERT J. REINHARD
reinhard@mofo.com

CALIFORNIA ENERGY MARKETS
cem@newsdata.com

HOWARD V. GOLUB
hgolub@nixonpeabody.com

JANINE L. SCANCARELLI
jscancarelli@flk.com

JOSEPH F. WIEDMAN
jwiedman@goodinmacbride.com

MARTIN A. MATTES
mmattes@nossaman.com

JEN MCGRAW
jen@cnt.org

LISA WEINZIMER
lisa_weinzimer@platts.com

STEVEN MOSS
steven@moss.net

SHAUN ELLIS
sellis@fypower.org

ARNO HARRIS
arno@recurrentenergy.com

ED LUCHA
ELL5@pge.com

GRACE LIVINGSTON-NUNLEY
gx12@pge.com

JASMIN ANSAR
jxa2@pge.com

JONATHAN FORRESTER
JDF1@PGE.COM

RAYMOND HUNG
RHHJ@pge.com

SEBASTIEN CSAPO
sscb@pge.com

SOUMYA SASTRY
svs6@pge.com

STEPHANIE LA SHAWN
S1L7@pge.com

VALERIE J. WINN
vjw3@pge.com

KARLA DAILEY
karla.dailey@cityofpaloalto.org

FARROKH ALBUYEH
farrokh.albuyeh@oati.net

DEAN R. TIBBS
dtibbs@aes4u.com

JEFFREY L. HAHN
jhahn@covantaenergy.com

ANDREW J. VAN HORN
andy.vanhorn@vhcenergy.com

JOSEPH M. PAUL
Joe.paul@dynegy.com

SUE KATELEY
info@calseia.org

GREG BLUE
gblue@enxco.com

SARAH BESERRA
sbeserra@sbcglobal.net

MONICA A. SCHWEBS, ESQ.
monica.schwebs@bingham.com

PETER W. HANSCHEN
phansch@mofo.com

JOSEPH HENRI
josephhenri@hotmail.com

PATRICIA THOMPSON
pthompson@summitblue.com

WILLIAM F. DIETRICH
dietrichlaw2@earthlink.net

BETTY SETO
Betty.Seto@kema.com

GERALD L. LAHR
JerryL@abag.ca.gov

JODY S. LONDON
jody_london_consulting@earthlink.net

STEVEN SCHILLER
steve@schiller.com

MRW & ASSOCIATES, INC.
mrw@mrwassoc.com

REED V. SCHMIDT
rschmidt@bartlewells.com

ADAM BRIONES
adamb@greenlining.org

STEVE KROMER
stevek@kromer.com

CLYDE MURLEY
clyde.murley@comcast.net

BRENDA LEMAY
brenda.lemay@horizonwind.com

CARLA PETERMAN
carla.peterman@gmail.com

EDWARD VINE
elvine@lbl.gov

RYAN WISER
rhwiser@lbl.gov

CHRIS MARNAY
C_Marnay@1b1.gov

PHILLIP J. MULLER
philm@scdenergy.com

RITA NORTON
rita@ritanortonconsulting.com

CARL PECHMAN
cpechman@powereconomics.com

MAHLON ALDRIDGE
emahlon@ecoact.org

RICHARD SMITH
richards@mid.org

ROGER VAN HOY
rogerv@mid.org

THOMAS S. KIMBALL
tomk@mid.org

WES MONIER
fwmonier@tid.org

BARBARA R. BARKOVICH
brbarkovich@earthlink.net

JOHN R. REDDING
johnredding@earthlink.net

CLARK BERNIER
clark.bernier@rlw.com

RICHARD MCCANN, PH.D
rmccann@umich.edu

CAROLYN M. KEHREIN
cmkehrein@ems-ca.com

CALIFORNIA ISO
e-recipient@caiso.com

GRANT ROSENBLUM, ESQ.
grosenblum@caiso.com

KAREN EDSON
151 BLUE RAVINE ROAD
FOLSOM, CA 95630

ROBIN SMUTNY-JONES
rsmutny-jones@caiso.com

SAEED FARROKHPAY
saeed.farrokhpay@ferc.gov

DAVID BRANCHCOMB
david@branchcomb.com

KENNY SWAIN
kenneth.swain@navigantconsulting.com

KIRBY DUSEL
kdusel@navigantconsulting.com

GORDON PICKERING
gpickering@navigantconsulting.com

LAURIE PARK
lpark@navigantconsulting.com

DAVID REYNOLDS
davidreynolds@ncpa.com

SCOTT TOMASHEFSKY
scott.tomashefsky@ncpa.com

ELLEN WOLFE
ewolfe@resero.com

AUDRA HARTMANN
Audra.Hartmann@Dynergy.com

BOB LUCAS
Bob.lucas@calobby.com

CURT BARRY
curt.barry@iwpnews.com

DAN SKOPEC
danskopec@gmail.com

DANIELLE MATTHEWS SEPERAS
dseperas@calpine.com

DAVID L. MODISETTE
dave@ppallc.com

DOUGLAS K. KERNER
dkk@eslawfirm.com

JUSTIN C. WYNNE
wynne@braunlegal.com

KASSANDRA GOUGH
kgough@calpine.com

KELLIE SMITH
kellie.smith@sen.ca.gov

KEVIN WOODRUFF
kdw@woodruff-expert-services.com

MICHAEL WAUGH
mwaugh@arb.ca.gov

PANAMA BARTHOLOMY
pbarthol@energy.state.ca.us

PATRICK STONER
pstoner@lgc.org

RACHEL MCMAHON
rachel@ceert.org

RYAN BERNARDO
bernardo@braunlegal.com

STEVEN A. LIPMAN
steven@lipmanconsulting.com

STEVEN KELLY
steven@iepa.com

WEBSTER TASAT
wtasat@arb.ca.gov

EDWARD J. TIEDEMANN
etiedemann@kmtg.com

LAURIE TEN HOPE
ltenhope@energy.state.ca.us

JOSHUA BUSHINSKY
bushinskyj@pewclimate.org

LYNN HAUG
lmh@eslawfirm.com

OBADIAH BARTHOLOMY
obartho@smud.org

BUD BEEBE
bbeebe@smud.org

BALWANT S. PUREWAL
bpurewal@water.ca.gov

DOUGLAS MACMULLLEN
dmacmll@water.ca.gov

KAREN NORENE MILLS
kmills@cbbf.com

KAREN LINDH
karen@klindh.com

ELIZABETH W. HADLEY
ehadley@reupower.com

DENISE HILL
Denise_Hill@transalta.com

ANNIE STANGE
sas@a-klaw.com

ELIZABETH WESTBY
egw@a-klaw.com

ALEXIA C. KELLY
akelly@climatetrust.org

ALAN COMNES
alan.comnes@nrgenergy.com

KYLE SILON
kyle.silon@ecosecurities.com

CATHIE ALLEN
californiadockets@pacificcorp.com

PHIL CARVER
Philip.H.Carver@state.or.us

SAM SADLER
samuel.r.sadler@state.or.us

LISA SCHWARTZ
lisa.c.schwartz@state.or.us

CLARE BREIDENICH
cbreidenich@yahoo.com

DONALD SCHOENBECK
dws@r-c-s-inc.com

JESUS ARREDONDO
jesus.arredondo@nrgenergy.com

CHARLIE BLAIR
charlie.blair@delta-ee.com

KAREN MCDONALD
karen.mcdonald@powerex.com

CLARENCE BINNINGER
clarence.binninger@doj.ca.gov

DAVID ZONANA
david.zonana@doj.ca.gov

Andrew Campbell
agc@cpuc.ca.gov

Anne Gillette
aeg@cpuc.ca.gov

Beth Moore
blm@cpuc.ca.gov

Cathleen A. Fogel
cf1@cpuc.ca.gov

Charlotte TerKeurst
cft@cpuc.ca.gov

Christine S. Tam
tam@cpuc.ca.gov

Donald R. Smith
dsh@cpuc.ca.gov

Ed Moldavsky
edm@cpuc.ca.gov

Eugene Cadenasso
cpe@cpuc.ca.gov

Harvey Y. Morris
hym@cpuc.ca.gov

Henry Stern
hs1@cpuc.ca.gov

Jaclyn Marks
jm3@cpuc.ca.gov

Jacqueline Greig
jnm@cpuc.ca.gov

Jamie Fordyce
jbf@cpuc.ca.gov

Jason R. Salmi Klotz
jk1@cpuc.ca.gov

George S. Tagnipes
jst@cpuc.ca.gov

Joel T. Perlstein
jtp@cpuc.ca.gov

Jonathan Lakritz
jol@cpuc.ca.gov

Judith Ikle
jci@cpuc.ca.gov

Julie A. Fitch
jf2@cpuc.ca.gov

Kristin Ralff Douglas
krd@cpuc.ca.gov

Lainie Motamedi
lrm@cpuc.ca.gov

Lana Tran
ltn@cpuc.ca.gov

Matthew Deal
mjd@cpuc.ca.gov

Nancy Ryan
ner@cpuc.ca.gov

Pamela Wellner
pw1@cpuc.ca.gov

Paul S. Phillips
psp@cpuc.ca.gov

Pearlie Sabino
pzs@cpuc.ca.gov

Rahmon Momoh
rmm@cpuc.ca.gov

Richard A. Myers
ram@cpuc.ca.gov

Sara M. Kamins
smk@cpuc.ca.gov

Scott Murtishaw
sgm@cpuc.ca.gov

Sean A. Simon
svn@cpuc.ca.gov

Steve Roscow
scr@cpuc.ca.gov

Theresa Cho
tcx@cpuc.ca.gov

BILL LOCKYER
ken.alex@doj.ca.gov

KEN ALEX
ken.alex@doj.ca.gov

BALDASSARO DI CAPO
bdicapo@caiso.com

JUDITH B. SANDERS
jsanders@caiso.com

JULIE GILL
jgill@caiso.com

MARY MCDONALD
DIRECTOR OF STATE AFFAIRS
CALIFORNIA INDEPENDENT SYSTEM
OPERATOR
CAISO
151 BLUE RAVINE ROAD
FOLSOM, CA 95630

PHILIP D. PETTINGILL
ppettingill@caiso.com

MICHAEL SCHEIBLE
mscheibl@arb.ca.gov

EVAN POWERS
epowers@arb.ca.gov

JEFFREY DOLL
jdoll@arb.ca.gov

PAM BURMICH
pburmich@arb.ca.gov

B. B. BLEVINS
bblevins@energy.state.ca.us

DARYL METZ
dmetz@energy.state.ca.us

DEBORAH SLON
deborah.slon@doj.ca.gov

Don Schultz
dks@cpuc.ca.gov

KAREN GRIFFIN
kgriffin@energy.state.ca.us

LISA DECARLO
ldecarlo@energy.state.ca.us

MARC PRYOR
mpryor@energy.state.ca.us

MICHELLE GARCIA
mgarcia@arb.ca.gov

PIERRE H. DUVAIR
pduvair@energy.state.ca.us

Wade McCartney
wsm@cpuc.ca.gov

CAROL J. HURLOCK
hurlock@water.ca.gov

HOLLY B. CRONIN
hcronin@water.ca.gov

ROSS A. MILLER
rmiller@energy.state.ca.us

PUC/X94356.v1